

## DOCUMENT RESUME

ED 237 670

CE 037 591

AUTHOR Kuzdzal, Stanley J.  
TITLE The Effects of Students' Intellectual and Physical Characteristics on Vocational Teachers' Nonverbal Behavior.  
PUB DATE 6 Dec 82  
NOTE 13p.; Paper presented at the American Vocational Association Convention (St. Louis, MO, December 6, 1982).  
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS \*Academic Achievement; Bias; Classroom Communication; Disabilities; Females; High Achievement; Influences; Intelligence; Low Achievement; \*Nonverbal Communication; Office Occupations Education; \*Physical Characteristics; Secondary Education; Student Characteristics; \*Student Teacher Relationship; \*Teacher Behavior; \*Vocational Education Teachers

## ABSTRACT

A study examined the effects of students' intellectual and physical characteristics on the nonverbal behavior of vocational teachers. During the study, 30 female vocational typing teachers were randomly assigned to teach a five-minute minilesson to 15 handicapped students and 15 students who were not handicapped. Both high- and low-achieving students were included in each of the two test groups. Videotapes focusing on the teachers' nonverbal behaviors were filmed during all of the teacher and student interactions. Based on an analysis of the videotapes by three experts, it would seem that, by an overwhelming margin, teachers displayed more positive nonverbal behaviors toward the nonhandicapped and high-achieving students than toward the handicapped and low-achieving students. Handicapped students received the most negative nonverbal behavior. These findings underscore the need for educators to study the nature and implications of nonverbal behavior from the perspective of its role as a communicative link between teacher and student. (MN)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED237670

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

☒ This document has been reproduced as  
received from the person or organization  
originating it.  
☐ Minor changes have been made to improve  
reproduction quality.

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official NIE  
position or policy.

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

S. Kurdzal

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

THE EFFECTS OF STUDENTS' INTELLECTUAL AND PHYSICAL CHARACTERISTICS  
ON VOCATIONAL TEACHERS' NONVERBAL BEHAVIOR

This presentation was given at the American Vocational Association's  
National Convention (Special Needs Division) in St. Louis, Missouri on  
December 6, 1982. It was presented by Dr. Stanley J. Kurdzal, Instructor in  
the Business Division at Delta College (University Center, MI).

\*\*\*\*\*

Introduction

While working on my doctorate at Wayne State University (in Detroit, MI),  
I became intrigued with nonverbal communication. My curiosity lead to the  
works of such experts as Birdwhisell, Hall, Galloway, Mehrabian, Rosenthal &  
Jacobson, Freud, and many others. Relating nonverbal communication to my own  
life, I quickly realized how my behaviors could effect my classroom students.  
Further, that their behaviors could cause a reaction in my behavior which  
would either thwart or enhance our interaction. I started observing my col-  
leagues' behaviors in their classrooms. It became evident that the teachers  
who commanded the greatest respect among the students had the most humanistic  
approach. In short, teachers who, for instance, smiled more than others  
seemed to have less behavior problems in the classroom. Also, teachers who  
maintained closer proximities toward their students, with few if any barriers  
between, had fewer behavior problems among the students. If the research  
findings as well as my unscientific observations were true then it seemed  
quite apparent to me that the study of nonverbal communication would help me  
become a better teacher.

CE 037591

Many teachers state that as trained professionals they treat all students alike. They claim to have good rapport with low-achievers and that they do not hate handicapped students. It is their strong affirmation that if these students fail, it is due to their own accord or inabilities. Herein lies the flaw I believe. Teachers are preoccupied with the verbal aspect of communication to such an extent that they become blind to their nonverbal behaviors. Nonverbal reactions become extremely overt when confronted with individuals that make a teacher's success difficult to achieve. Such is the case of low-achievers and handicapped students.

As a vocational teacher, I had many low-achieving students who had difficulties in college preparatory classes. These students had low reading and math levels. Consequently, it was determined by the powers to be (counselors and principals) that these students could best be served in a vocational program where they could learn a skill for later job application. At the same time, I had many handicapped students (both mentally and physically). They were channeled into the vocational programs because of a general belief that they could not be successful in any other educational programs. Certainly these two types of students can provide a challenging (as well as a difficult) experience for any teacher. Further complicating the problem were pressures in education such as:

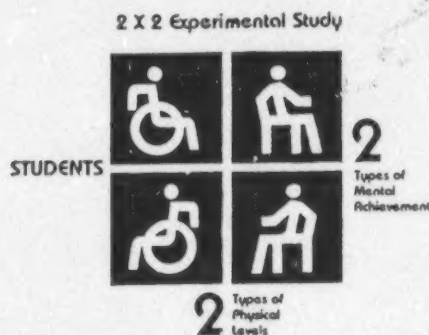
1. Student involvement in drugs, alcohol, and sex.
2. Lower student reading and math levels.
3. Students' increased need to be entertained.
4. Burdensome paperwork.
5. Staff cutbacks.
6. Large class sizes.

7. Labor unrest (union vs. management).
8. Inadequate supplies, equipment, and room conditions due to school district financial problems.
9. Increased community militancy.
10. Discipline problems.

In light of the above, it seems apparent that a teacher would have difficulty controlling negative feelings. Since low-achieving and handicapped students have in many instances low expectations as well as inferiority complexes, it seemed clear that any negative reactions channeled from the teacher toward those student types would create even further complications in the educational interaction.

### Purpose of Study

My dissertation was entitled, "Interaction of Student Cognitive and Psychomotor Characteristics with Vocational Teachers' Nonverbal Communication Behaviors." In other words, "How Teachers Behave Toward Different Types of Students." I developed an experimental study that involved two types of student mental achievement (high & low-achievers) and two types of student physical levels (handicapped & nonhandicapped).

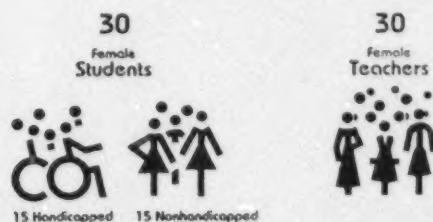


Specifically, it was the intent to observe if different nonverbal behaviors (facial expressions, kinesics, and proxemics) were exhibited by teachers when interacting with students identified as:

1. nonhandicapped, high-achievers,
2. nonhandicapped, low-achievers,
3. handicapped, high-achievers, and
4. handicapped, low-achievers.

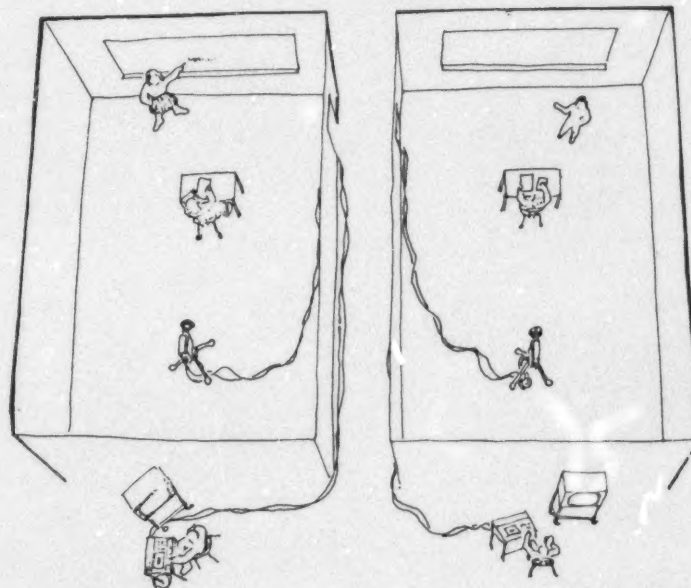
### Methodology

Thirty Vocational Typing teachers were randomly assigned to teach a five-minute mini-lesson to 15 students identified as handicapped (low-/high-achieving) and 15 nonhandicapped (low-/high-achieving).



Before presenting the typing lessons, the teachers were supplied information sheets that identified hypothetical academic performance levels of students. Teachers were not forewarned that some students had physical impairments below waist level.

All teacher-student interactions were video taped and catalogued.



The filming focused on the teachers' behaviors. The student was not identified on the video tapes according to the four student types and due to the camera angle it was not possible to even tell if the student was handicapped or nonhandicapped. In fact, the only part of the student that was evident was their back from above the waist.

Later these video tapes were judged by three experts.



The judges were not informed of the physical or intellectual characteristics of the students prior to or during the evaluation sessions. The judges viewed and rated student-teacher interactions in five, one-minute intervals using an instrument likened to the Flander's Interaction Analysis for verbal communication.

The judging instrument was divided into three mediator categories (facial expression, kinesics, and proxemics).

**Independent Judges' Video Tape Rating Schedule**  
(from one 5 - minute teacher/student interaction)

**Nonverbal Mediators**

**Facial Expression -**

| Time Intervals | Minutes         | 1 | 2 | 3 | 4 | 5 |
|----------------|-----------------|---|---|---|---|---|
| Behavior       | (-) Inhibiting  |   |   |   |   |   |
| Categories     | (0) Neutral     |   |   |   |   |   |
|                | (+) Encouraging |   |   |   |   |   |

| Category Total Marks | Category Assigned Points | Category Total Points | Mediator TOTAL POINTS |
|----------------------|--------------------------|-----------------------|-----------------------|
|                      | X (-1)                   | =                     |                       |
|                      | X ( 0)                   | =                     |                       |
|                      | X (+1)                   | =                     |                       |

.....

**Kinesics -**

| Time Intervals | Minutes         | 1 | 2 | 3 | 4 | 5 |
|----------------|-----------------|---|---|---|---|---|
| Behavior       | (-) Inhibiting  |   |   |   |   |   |
| Categories     | (0) Neutral     |   |   |   |   |   |
|                | (+) Encouraging |   |   |   |   |   |

| Category Total Marks | Category Assigned Points | Category Total Points |
|----------------------|--------------------------|-----------------------|
|                      | X (-1)                   | =                     |
|                      | X ( 0)                   | =                     |
|                      | X (+1)                   | =                     |

.....

**Proxemics -**

| Time Intervals | Minutes         | 1 | 2 | 3 | 4 | 5 |
|----------------|-----------------|---|---|---|---|---|
| Behavior       | (-) Inhibiting  |   |   |   |   |   |
| Categories     | (0) Neutral     |   |   |   |   |   |
|                | (+) Encouraging |   |   |   |   |   |

| Category Total Marks | Category Assigned Points | Category Total Points |
|----------------------|--------------------------|-----------------------|
|                      | X (-1)                   | =                     |
|                      | X ( 0)                   | =                     |
|                      | X (+1)                   | =                     |

.....

Student # \_\_\_\_\_

Teacher # \_\_\_\_\_

Judge # \_\_\_\_\_

Interaction # \_\_\_\_\_

**Indices**

- Inhibiting = Negative reaction.
- Neutral = No commitment one way or the other.
- Encouraging = Positive reaction.
- Facial Expression = Eye contact, mouth presence, wrinkling, etc.
- Kinesics = Gestures, postures, etc.
- Proxemics = Distances between interactors, territoriality.

**TOTAL POINTS**

Each mediator category was sub-divided into three levels of behavior (encouraging, neutral, and inhibiting). The judges use of this instrument was really quite simple. The video tape would play for the first minute of the five-minute interaction between one teacher and one student. At the end of that minute the video tape would go into a color test pattern. This was significant for two reasons. First of all, the entire video taping of student/teacher interactions was in black & white. Second of all, the test pattern was an indication to the judge that they had 20 seconds to make a decision as to the type of nonverbal behavior the teacher displayed in that portion of the interaction. Within the 20 second time period the judge had to put one check mark in each of the nonverbal mediator areas (facial expression, kinesics, and proxemics). Within the parameters of the facial expression mediator the judge had to decide if the teacher's various facial expressions during the first minute were either encouraging or inhibiting to the student. If neither behavior could be defined as the most predominant portion of that minute segment then the judge chose the neutral behavior. The same system was followed for the other two mediators (kinesics--body movements, gestures, etc. and proxemics--distances, territoriality). At the end of the 20 second judging period the video tape would again display the teacher/student interaction for the second minute of the five-minute duration. After each minute of the interaction the judge would have 20 seconds in which to make a decision as to the type of nonverbal behavior the teacher displayed toward the student.

After a judge finished judging a five-minute interaction the judges rating schedule form was placed in a sealed envelope. It would later be opened and the rating schedule would be tallied by an independent source. I was not involved in any of the processes from the time the experiment began to the time the judges rating schedule forms were tallied. This allowed for complete objectivity.

### Review of Video Tape

At this point, I would like to review the three major areas of nonverbal communication that were looked at by the judges while viewing the video tapes. First, facial expression was observed in the teachers. This area encompasses such cues as eye contact, pupil dilation, brow wrinkling, mouth movements, nostril flare, and muscle tension. This area of a teacher's nonverbal communication was viewed in terms of positive, neutral, or negative behavior displayed toward the student. The second area of nonverbal communication the judges viewed in the teachers was kinesics. This area encompasses such cues as hand and arm gestures, postures, body leans, body rigidity or relaxedness, etc. The teacher's nonverbal communication was viewed in terms of positive, neutral, or negative behavior displayed toward the student. The third and final area of nonverbal communication the judges viewed in the teachers was proxemics. This area encompassed such cues as intimate, personal, and impersonal distances maintained between the teacher and the student. Again, the teacher's nonverbal communication was viewed in terms of positive, neutral, or negative behavior displayed toward the student.

Let us now look at some slides taken from an actual video tape. The first seven slides will show a student interacting with two different teachers on two separate occasions. Notice in the first slide the closeness (proxemics of the teacher, the relaxed stance and the smiling face. In the second slide we can still see the smiling face and the relaxed stance. Yet, even though the teacher is positioned with the desk between herself and the student there is still a positive behavior displayed in the body lean toward the student. The fourth slide shows the same student interacting with another teacher during a five-minute typing lesson. The teacher is relaxed, smiling,

maintaining eye contact and overall giving positive nonverbal cues. The next slide as well as the following two indicate positiveness in the interacting relationship of student to teacher and vice versa. In fact, this student was a nonhandicapped, high-achiever. This was very indicative of how most of the teachers reacted toward that type of student.

At this point, let us quickly review the three areas of nonverbal communication that were being observed in the study. The three areas were: facial expression, kinesics, and proxemics. Now, let us view how the same teachers react toward a handicapped, low-achieving student. The first teacher has her back toward the student, has a rigid body with hand on hip. In the next slide the teacher does not smile, does not maintain any closer proximity than in the previous slide, and has crossed her arms across the chest. The third slide shows the teacher positioned in front of the desk with the student on the other side. The teacher has hand on hip and is leaning away from the student. The next two slides show a large distance maintained, lack of smiling, rigid body, and threatening gestures (such as clinched fists and finger pointing). As we view the next four slides let us observe if this teacher's behaviors are the same as or different than the first teacher's behaviors. There is the large distance maintained, the finger pointing, the lack of smiling, the stare, the hand on hip, and the negatively skewed body lean. In fact, this teacher is displaying almost the same negative nonverbal behaviors as the first teacher. This was a good representation of how the majority of the teachers reacted toward the handicapped, low-achieving students.

What you've viewed is exactly what the judges viewed. How would you rate the teachers when they interacted with the nonhandicapped, high-achieving students versus how they interacted with the handicapped, low-achieving students? The data, once analyzed, indicated a significant difference between

the teachers' behaviors toward the nonhandicapped versus handicapped students as well as towards the high-achieving versus low-achieving students. The teachers overwhelmingly displayed more positive nonverbal behaviors toward the nonhandicapped and high-achieving factors than toward the handicapped and low-achieving factors of the study. But, when all was said and done, the factor that received the most positive teacher nonverbal behaviors was the nonhandicapped student factor. The handicapped student received the most negative teacher nonverbal behavior.

### Summary

The process of analyzing and acknowledging behavior is one that has its initial stages within the family. We first learn how to communicate through imitation of our parents' behaviors (Sarles, 1975). Imitation is a major source of learning (Wynne, 1963). We learn to communicate with others by learning from others who have set expectancies as well as learned prejudices. We learn, in fact, to make distinctions as to what is good and what is bad. We even learn what is beautiful and what is not, developing expectancy levels from prior knowledge when categorizing others (Dion, Bersheid and Walster, 1972). Teachers are no exception and are often criticized for giving preferential treatment to some students while ignoring others (Meichenbaum, 1969; Allen & Feldman, 1974 & 1979; Rubovits & Machr, 1971). To assume that this behavior is exclusive to teachers is erroneous. All individuals experience negative nonverbal behavior and without being aware, judge what is good and/or beautiful.

First impressions become critical and thus affect subsequent interactions with others (Bradskey, 1954; Staffieri, 1967). The most obvious criteria for initial judging is physical appearance and, as noted by Chaikin (1978), plays a major role in conceptualizing what we perceive of an individual. A study by

Rosenthal and Jacobson (1968) noted that teachers did, indeed base expectations of students on physical appearance as well as on prior knowledge of their past academic achievement. Individual perception of others initiates from learned expectations (Brophy & Good, 1970). Expectations affect interaction and, though not understood completely, can be observed through sequences of nonverbal behavior.

Fields other than education have researched nonverbal communication in greater quantities, for a longer period of time and in much more detail than has education. Educators are really in their infancy, comparatively speaking. If educators are to understand that nonverbal communication is an important aspect to the communicative link between teacher and student, they must invest more time into its study.

If educators are to become sensitive to the needs of their students, they must first understand the communication they and their students exhibit, especially the nonverbal aspect. The old adage, "actions speak louder than words," is applicable in education and indeed in the classroom. Assessing the importance of nonverbal communication is an important task of the educator who is interested in improving the procedures of teaching (West, 1969) and of treating "teaching as a science" (Fredrickson, 1974).

## REFERENCES

- Allen, B. L., & Feldman, R. S. Tutor attribution and attitude as a function of tutee performance. Journal of Applied Social Psychology, 1974, 4, 311-320.
- Allen, B. L., & Feldman, R. S. Student success and tutor verbal and nonverbal behavior. The Journal of Educational Research, January/February 1979, 72, 142-149.
- Bradsky, C. M. A study of norms for body form-behavior relationships. Washington, D.C.: Catholic University of America Press, 1954.
- Brophy, J. & Good, T. L. Analyzing classroom interaction: A more powerful alternative. Educational Technology, 1971, in press.
- Chaikin, A. L., Gillen, B., Derlega, V. J., Heinin, J. R. K., & Wilson, M. Students' reactions to teachers' physical attractiveness and nonverbal behavior: Two exploratory studies. Psychology in the Schools, October 1978, 15, 588-595.
- Dion, K., Berscheid, E., & Walster, E. What is beautiful is good. Journal of Personality and Social Psychology, 1972, 24 (3), 285-290.
- Fredrickson, P. Analysis of teacher nonverbal behavior and student perceptions of that behavior in a high school typewriting classroom. Unpublished doctoral dissertation, University of Massachusetts, 1974.
- Meichenbaum, O. H., Bowers, K. S., & Ross, R. P. A behavioral analysis of teacher expectancy effects. Journal of Personality and Social Psychology, 1969, 13, 306-316.
- Rosenthal, R., & Jacobson, L. Pygmalion in the classroom. New York: Holt, Rinehart & Winston, 1968.
- Rubovits, P., & Maehr, M. Pygmalion analyzed. Journal of Personality and Social Psychology, 1971, 19, 197-203.
- Sarles, H. Language and communication II: The view from '74. In P. Pliner, L. Krames & T. Alloway (Eds.), Advances in the study of communication and affect. New York: Plenum, 1975, 2.
- Staffieri, J. R. A study of social stereotype of body image in children. Journal of Personality and Social Psychology, 1967, 7, 101-104.
- West, L. J. Acquisition of typewriting skills, methods and research in teaching typewriting. New York: Pitman Publishing Corporation, 1969.
- Wynne, J. P. Theories of Education. New York: Harper and Row, 1963.